REMARKS

Rejection of the claims under 35 USC 102:

Claims 14-19 and 23-26 have been rejected under 35 U.S.C. 102(b) as being anticipated by Bolcsak et al. Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claims 14 and 26 to recite "a biologically labile surfactant". Support for the amendment can be found in the specification on page 17 lines 14-20. The bonds described in Bolcsak et al are not labile under physiological conditions and are in fact very stable (see column 7 lines 28-41, column 11 lines 54-64, column 17 lines 31-50).

Claims 14-15 and 26 have been rejected under 35 U.S.C. 102(b) as being anticipated by Imre et al. Applicants have amended the claims to obviate the rejection. Specifically, Applicants have amended claims 14 and 26 to recite "a biologically labile surfactant". Imre et al. do not disclose an amphipathic molecule containing a biologically labile surfactant. The molecule disclosed in Imre et al. does not contain a biologically labile bond.

Claims 20-22 have been rejected under 35 U.S.C. 102(e) as being anticipated by Grinstaff et al. The instant application is a divisional of Application No. 10/081,461; filed February 21, 2002, which is a continuation-in-part of U.S. Patent 6,429,200, filed July 16, 1999. The invention is disclosed in U.S. Patent 6,429,200 (see especially column 5 lines 30-55; column 7 lines 17-23; and column 10 line 60 to column 11 line 60) which was filed prior to the 102(e) date of Grinstaff.

Double Patenting

Claim 26 has been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,429,200. Applicants have filed, with this amendment, a terminal disclaimer to obviate the rejection.

Claims 14-25 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,673,612. Applicants have filed, with this amendment, a terminal disclaimer to obviate the rejection.

The Examiner's objections and rejections are now believed to be overcome by this response to the Office Action. In view of Applicants' amendment and arguments, it is submitted that claims 14-26 should be allowable. Applicants respectfully request a timely Notice of Allowance be issued in the case.

Respectfully submitted,

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO at 703-872-9306 or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: 4/8/05.

Kirk Ekena

AMENDMENTS TO THE DRAWINGS

The drawing on page 39 of the originally filed specification has been deleted from page 39 and is submitted as drawing Fig. 1 as requested by the examiner.

Micellar Systems

~~The following specification is a Continuation-In-Part of United States Patent Application 09/354,957 filed on July 16th, 1999.~~ This application is a divisional of Application No. 10/081,461; filed February 21, 2002, which is a continuation-in-part of Application No. 09/354,957, filed July 16, 1999, issued as U.S. Patent 6,429,200, which claims the benefit of U.S. Provisional Application No. 60/093,321, filed 07/17/1998.

FEDERALLY SPONSORED RESEARCH

N/A

Field of the Invention

The invention generally relates to micellar systems for use in biologic systems. More particularly, a process is provided for the use of reverse micelles for the delivery of nucleic acids and genes to cells.

Background

Biologically active compounds such as proteins, enzymes, and nucleic acids have been delivered to the cells using amphipathic compounds that contain both hydrophobic and hydrophilic domains. Typically these amphipathic compounds are organized into vesicular structures such as liposomes, micellar, or inverse micellar structures. Liposomes can contain an aqueous volume that is entirely enclosed by a membrane composed of lipid molecules (usually phospholipids) (R.C. New, p. 1, chapter 1, "Introduction" in Liposomes: A Practical Approach, ed. R.C. New IRL Press at Oxford University Press, Oxford, 1990). Micelles and inverse micelles are microscopic vesicles that contain amphipathic molecules but do not contain an aqueous volume that is entirely enclosed by a